



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 26, 2017

Jayne Walz
Regulatory Manager
Valent BioSciences LLC
870 Technology Way
Libertyville, IL 60048

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – To Revise the Expiration Date Statement on the Label and Make Revisions Requested by the EPA Response to the Storage Stability and Corrosion Characteristics Term of Registration
Product Name: VBC-60236 Biological Insecticide Dry Flowable
EPA Registration Number: 73049-480
Application Date: January 6, 2017
OPP Decision Number: 525280

Dear Ms. Walz:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration

process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

Additionally, as requested by the EPA in a letter dated June 12, 2015, you have replaced "Expiration Date _____" with "Not for sale or use after [Date stamped/placed on labeling will be 12 months after the date of manufacture]" on the label. Thus, you have fulfilled term #4 of the September 27, 2012, VBC-60236 Biological Insecticide Dry Flowable Registration Notice.

If you have any questions, please contact Daniel Schoeff by phone at (703) 347-0143 or via email at schoeff.daniel@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeannine Kausch', written in a cursive style.

Jeannine Kausch, Product Manager 92
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

LABEL AMENDMENT

**VBC-60236
BIOLOGICAL INSECTICIDE
DRY FLOWABLE**



For Organic Production

ACCEPTED
04/26/2017
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 73049-480

Active Ingredient:

<i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> strain VBTS-2546 fermentation solids, spores, and insecticidal toxins*	67.0%
Other Ingredients	33.0%
Total	100.0%

*Potency: 110,000 Cabbage Looper Units (CLU) per mg of product (50 billion CLU per pound of product)

The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Manufactured for:
Valent BioSciences LLC
870 Technology Way
Libertyville, IL 60048

EPA Registration No. 73049-480
EPA Est. No. 33762-IA-1

Net Weight: _____
Lot No.: _____

Not for sale or use after [Date stamped/placed on labeling will be 12 months after the date of manufacture]

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixer/loaders and applicators must wear a NIOSH-approved particulate filter with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

This product must not be applied aerially within ¼ mile of any habitats of endangered or threatened lepidoptera species. No manual application can be made within 300 feet of any threatened or endangered lepidoptera species.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is:

Coveralls
Waterproof gloves
Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of the treated areas until sprays have dried.

PRODUCT INFORMATION

After ingesting a lethal dose of VBC-60236 Biological Insecticide Dry Flowable (hereafter referred to as VBC-60236), larvae stop feeding within the hour, and will die within several hours to 3 days. Mortality varies with larval size (instar), lepidopteran species, and dose consumed. Following ingestion, larvae become sluggish, discolor, then shrivel, blacken and die. Smaller larvae die more quickly.

VBC-60236 may be applied in conventional ground or aerial equipment with quantities of water sufficient to provide uniform coverage of infested plant parts. The volume of water needed per acre will depend on crop development, relative humidity, spray equipment, and local experience. Usually, selection of moderate to high spray volume will provide the best results in most equipment. For optimal results, use at least 20 gallons of water per acre for ground application. For aerial application, use at least 3 gallons of water per acre, except in arid areas where 5 to 10 gallons of water per acre are required.

APPLICATION INSTRUCTIONS

See Chemigation section for chemigation use directions.

Days to Harvest: There are no restrictions on applying VBC-60236 up to the time of harvest. Individual state regulations may vary and must be consulted for allowable pre-harvest application intervals.

Use VBC-60236 for any labeled pest in both field and greenhouse crops as well as in self-contained, closed-system, ornamental ponds as described on this label.

VBC-60236 is an insecticide for use against listed caterpillars (larvae) of lepidopterous insects. Close scouting and early attention to infestations is highly recommended. Larvae must eat deposits of VBC-60236 to be affected. Always follow these directions:

- Treat at egg hatch or when larvae are young (early instars) before the crop is damaged.
- Larvae must be actively feeding on treated, exposed plant surfaces. If temperatures are cold and larvae are less active, control may be slower.
- Thorough spray coverage is needed to provide complete and uniform deposit of VBC-60236 on all plant foliage and fruit surfaces. Use overhead and drop nozzles to obtain good spray coverage on both sides of foliage. Use sufficient spray volume to ensure uniform deposition on all plant surfaces. If foliage canopy is extensive or dense, increase spray volume to ensure all surfaces are sufficiently covered.
- Under heavy pest population pressure or multiple larval life stages, use the higher label rates, shorten the spray interval, and/or raise spray volume to improve spray coverage.
- Repeat applications at an interval sufficient to maintain control, usually 3 to 14 days depending on plant growth rate, moth activity, rainfall after treating, and other factors. If attempting to control a pest with a single spray, make the treatment when egg hatch is essentially complete, but before crop damage occurs.
- For hard-to-wet crops, such as cabbage, or to improve weather-fastness of the spray deposits, use a spreader-sticker approved for use on growing and harvested crops.
- Do not use if rain is expected within 24 hours of spraying. If rain falls shortly after application, re-treatment may be necessary.
- VBC-60236 may be tank mixed with other labeled insecticides to enhance control. Additions of other commonly used herbicides, insecticides, and fungicides are generally not deleterious to VBC-60236; however, do not apply as a tank mix with or within two days of application of alkaline products such as foliar nutrients, liquid fertilizers, or metal-based fungicides (e.g. copper sulfate-based materials). Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Before tank mixing VBC-60236 with other labeled products, including spreader stickers, check for tank mix compatibility. For maximal preservation of beneficial predators and parasites, do not use VBC-60236 in a program with broad spectrum pest control insecticides.

Mixing instructions: Add water to the mix tank and provide moderate agitation. While agitating, add the required amount of VBC-60236. Continue agitation, and add other spray materials, if any. Add remaining water, if any, and agitate until fully mixed. Maintain the suspension with moderate agitation while loading and spraying. Do not mix more VBC-60236 than can be used in a 3-day period.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all of these factors when making decisions.

For Smaller Spray Volumes:

<u>If Product Use Rate is</u>	<u>Use This Amount Per Gallon Water</u>	
1/4 lb./acre or 1/4 lb./100 gals. water	1/2 tsp. product	(0.04 oz)
1/2 lb./acre or 1/2 lb./100 gals. water	1 tsp. product	(0.08 oz)
1 lb./acre or 1 lb./100 gals. water	2 tsps. product	(0.16 oz)

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Spray Preparation

First prepare a suspension of VBC-60236 in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of VBC-60236, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of VBC-60236 into the irrigation water line so as to deliver the desired rate per acre. The suspension of VBC-60236 must be injected with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. Any questions on calibration should be directed to your State Extension Service Specialists, to equipment manufacturers or to other experts.

NOTE: Avoid further field irrigation over the treated area for 24 to 48 hours after treatment with VBC-60236 to prevent washing the material off the crop.

GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in the mix tank during mixing and application to ensure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume for a more dilute solution per unit time.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment, system connections or fittings leak, nozzles do not provide uniform distribution or lines containing the product must be dismantled and drained.

FIELD CROPS

CROP	PEST	APPLICATION RATE (lb product/A)
<p>Vegetable, root and tuber (Crop Group 1) Including: Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden; beet, sugar; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac; chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret; sweet potato; taniel; turmeric; turnip; yam bean; yam, true.</p>	<p>Looper Omnivorous Leafroller Hornworm Imported Cabbageworm Diamondback Moth Green Cloverworm Webworm Saltmarsh Caterpillar Cutworm Cross-striped Cabbageworm <i>Heliothis virescens</i> <i>Helicoverpa zea</i></p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>
<p>Vegetable, bulb (Crop Group 3-07) Including: Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.</p>	<p>Looper Omnivorous Leafroller Hornworm Imported Cabbageworm Diamondback Moth Green Cloverworm Webworm Saltmarsh Caterpillar Cutworm Cross-striped Cabbageworm <i>Heliothis virescens</i> <i>Helicoverpa zea</i></p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>

CROP	PEST	APPLICATION RATE (lb product/A)
<p>Vegetable, leafy, except <i>Brassica</i> (Crop Group 4) Including: Amaranth (Chinese spinach); arugula (rocket); cardoon; celery; celery, Chinese; celtuce; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce, head and leaf; orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); rhubarb; spinach, New Zealand; spinach, vine; Swiss chard.</p>	<p>Looper Omnivorous Leafroller Hornworm Imported Cabbageworm Diamondback Moth Green Cloverworm Webworm Saltmarsh Caterpillar Cutworm Cross-striped Cabbageworm <i>Heliothis virescens</i> <i>Helicoverpa zea</i></p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>
<p>Vegetable, <i>Brassica</i> (cole) leafy (Crop Group 5) Including: Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens.</p>	<p>Looper Omnivorous Leafroller Hornworm Imported Cabbageworm Diamondback Moth Green Cloverworm Webworm Saltmarsh Caterpillar Cutworm Cross-striped Cabbageworm <i>Heliothis virescens</i> <i>Helicoverpa zea</i></p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>
<p>Vegetable, legume (succulent or dried) (Crop Group 6) Including: Bean (<i>Lupinus</i>) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (<i>Phaseolus</i>) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (<i>Vigna</i>) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlog bean); broad bean (fava); chickpea (garbanzo); guar; jackbean; lablab bean; lentil; pea (<i>Pisum</i>) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.</p>	<p>Looper Soybean Looper Green Cloverworm Velvetbean Caterpillar</p> <p>Armyworm¹ Podworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>

CROP	PEST	APPLICATION RATE (lb product/A)
<p>Vegetable, fruiting (Crop Group 8-10) Including: African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.</p>	<p>Looper Hornworm Tomato Fruitworm Variegated Cutworm Saltmarsh Caterpillar</p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>
<p>Vegetable, cucurbit (Crop Group 9) Including: Chayote; Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica</i> spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon.</p>	<p>Looper Melonworm Rindworm Complex</p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>
<p>Fruit, citrus (Crop Group 10-10) Including: Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; Satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliolate orange; unqi fruit; cultivars, varieties, and/or hybrids of these.</p>	<p>Fruittree Leafroller Orangedog Citrus Cutworm³</p>	<p>0.25-1</p>
<p>Fruit, pome (Crop Group 11-10) Including: Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.</p>	<p>Walnut Caterpillar Cankerworm Gypsy Moth Variegated Leafroller Redbanded Leafroller Tufted Apple Budworm Fruittree Leafroller Oriental Fruit Moth Cutworm Filbert Leafroller Obliquebanded Leafroller Codling Moth Twig Borer</p> <p>Armyworm¹</p>	<p>0.25-1</p> <p>0.5-1</p>

CROP	PEST	APPLICATION RATE (lb product/A)
Grain, cereal (Crop Group 15) Including: Barley; buckwheat; corn; millet, pearl; millet, proso; oats; popcorn; rice; rye; sorghum (milo); teosinte; wheat; wild rice.	Looper Headworm European Corn Borer Armyworm ¹	0.25-1 0.5-1
Herbs and spices (Crop Group 19) Including: Allspice; angelica; anise; anise, star; annatto (seed); balm; basil; borage; burnet; chamomile; caper buds; caraway; caraway, black; cardamom; cassia bark; cassia buds; catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; coriander leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; culantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise, horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold, marjoram; mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood.	Looper Saltmarsh Caterpillar Armyworm ¹	0.25-1 0.5-1
Alfalfa (hay and seed) Hay and other Forage Crops	Looper Alfalfa Caterpillar European Skipper (Essex Skipper) Armyworm ¹	0.25-1 0.5-1
Asparagus	Armyworm ¹	0.25-1
Avocado	Amobia Moth Omnivorous Leafroller Omnivorous Looper Orange Tortrix Spanworm	0.25-1
Banana	Banana Skipper	0.25-1
Coffee*	Banana Skipper	0.25-1

CROP	PEST	APPLICATION RATE (lb product/A)
Cotton	Tobacco Budworm ² Cotton Budworm ² Looper Saltmarsh Caterpillar	0.25-1
	Armyworm ¹	0.5-1
Flowers, Bedding Plants and Ornamentals**	Looper Tobacco Budworm Omnivorous Leafroller Omnivorous Looper Diamondback Moth Ello Moth (Hornworm) Io Moth Oleander Moth Azalea Caterpillar	0.25-1
	Armyworm ¹	0.5-1
Fruit, tropical	Hornworm Leafroller Omnivorous Looper Looper	0.25-1
Hop	Looper	0.25-1
	Armyworm ¹	0.5-1
Malanga	Saltmarsh Caterpillar	0.25-1
	Armyworm ¹	0.5-1
Peanut	Looper Velvetbean Caterpillar Green Cloverworm Podworm ¹	0.25-1
Pineapple	<i>Batrachedra comosae</i> (Hodges) <i>Thecla basilides</i> (Geyr)	0.25-0.5

CROP	PEST	APPLICATION RATE (lb product/A)
Pomegranate	Walnut Caterpillar Cankerworm Gypsy Moth Variegated Leafroller Redbanded Leafroller Tufted Apple Budmoth Fruittree Leafroller Oriental Fruit Moth Cutworm Filbert Leafroller Codling Moth Armyworm ¹ Twig Borer	0.25-1
Rape (Canola)	Looper <i>Heliothis virescens</i> <i>Helicoverpa zea</i> Armyworm ¹	0.25-1 0.5-1
Safflower	Looper Saltmarsh Caterpillar Armyworm ¹	0.25-1 0.5-1
Sunflower	Looper Head Moth	0.25-1
Tobacco	Tobacco Budworm Hornworm Looper	0.25-1
Turf	Sod Webworm	0.5-1
Watercress	Looper Armyworm ¹ Diamondback Moth	0.25-1 Spray only when there is no standing water in the bed

* Drench bark and new shoots with 1/2-1 lbs of VBC-60236 per acre, mixing with a sufficient volume of water to ensure uniform coverage.

**Use a ground applicator, a minimum of 50 gallons total mix per acre, 50-100 psi and 3-7 nozzles per bed.

¹ Use VBC-60236 to control small armyworms and/or podworms (1st and 2nd instar) when populations are light and full coverage sprays are applied. Repeat treatment as necessary. If mature worms or heavy populations are present, use a contact insecticide to enhance control.

²Use to control light to moderate populations of newly hatched worms in integrated pest management conditions. Repeat treatments at 4- to 5-day intervals as long as necessary and results are acceptable. Use in combination with ovicidal rates of labeled *Heliothis* ovicides.

³Apply to light to moderate populations of newly-hatched worms.

GREENHOUSE/SHADEHOUSE AND OUTDOOR NURSERY

CROP	PEST	APPLICATION RATE (lb product/A)
Vegetable, leafy, except <i>Brassica</i> (Crop Group 4) Including: Amaranth (Chinese spinach); arugula (rocket); cardoon; celery; celery, Chinese; celtuce; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce, head and leaf; orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); rhubarb; spinach, New Zealand; spinach, vine; Swiss chard.	<i>Heliothis virescens</i> <i>Helicoverpa zea</i>	0.25-1
Vegetable, <i>Brassica</i> (cole) leafy (Crop Group 5) Including: Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens.	<i>Heliothis virescens</i> <i>Helicoverpa zea</i>	0.25-1
Vegetable, fruiting (Crop Group 8-10) Including: African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.	<i>Heliothis virescens</i> <i>Helicoverpa zea</i>	0.25-1

CROP	PEST	APPLICATION RATE (lb product/A)
Herbs and spices (Crop Group 19) Including: Allspice; angelica; anise; anise, star; annatto (seed); balm; basil; borage; burnet; chamomile; caper buds; caraway; caraway, black; cardamom; cassia bark; cassia buds; catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; coriander leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; culantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise, horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold, marjoram; mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood.	<i>Heliothis virescens</i> <i>Helicoverpa zea</i>	0.25-1

AQUATIC ORNAMENTALS

CROP	PESTS	Use Rate*
Water lilies and other aquatic ornamentals	China Mark Moth	$\frac{1}{4}$ - $\frac{1}{2}$ tsp VBC-60236/100 sq.ft. (0.6 – 1.2 g VBC-60236/100 sq.ft.)

FOR USE IN SELF-CONTAINED, CLOSED-SYSTEM, ORNAMENTAL PONDS ONLY.

*For a 10' x 10' pond (100 sq. ft.), mix $\frac{1}{4}$ - $\frac{1}{2}$ teaspoon of VBC-60236 in 1 quart of water and apply to pond surface. Adjust quantities accordingly based on specific pond size.

ORNAMENTAL TREES

CROP	PEST	APPLICATION RATE (lb product/100gal water*)
Shade Trees Sugar Maple Trees Ornamental Trees (Coniferous and deciduous)	Gypsy Moth Bagworm Redhumped Caterpillar Spring and Fall Cankerworm Fall Webworm Elm Spanworm Tent Caterpillar California Oakworm Pine Butterfly Spruce Budworm Saddle Prominent Caterpillar Douglas Fir Tussock Moth Western Tussock Moth Fruittree Leafroller Blackheaded Budworm Mimosa Webworm Jack Pine Budworm Saddleback Caterpillar Greenstriped Mapleworm Hemlock Looper	0.25-1

*Rate for hydraulic sprayer. For mist blowers, mix the applicable amount of product (lbs.) in 10 gallons of water.

Note: Use a suitable spreader-sticker approved for forest insect control to improve coverage, improve rain fastness and/or resist wash-off.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep containers tightly closed when not in use. Do not store at temperatures greater than 100°F.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling:

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

NOTICE TO USER

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.

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